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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,508	10/24/2003	Lev Novik	MSFT-2845/306724.01	9285
23377	7590	06/01/2006	EXAMINER	
WOODCOCK WASHBURN LLP ONE LIBERTY PLACE, 46TH FLOOR 1650 MARKET STREET PHILADELPHIA, PA 19103			EBIRIM, EMEKA	
			ART UNIT	PAPER NUMBER
			2166	

DATE MAILED: 06/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/692,508	NOVIK, LEV	
	Examiner	Art Unit	
	Emeka Ebirim	2166	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/25/06, 6/17/05, 2/06/p 6</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Status

1. Claims 1 – 30 are pending in this Office action.

The application has been examined. Claims 1 – 30 are rejected as detailed below and are pending in this office action.

Specification

2. The abstract recites "invention with with other data". Examiner presumes the applicant intended to write only one "with". Appropriate correction is required.

Claim Objections

3. Claim 4 is objected to because of the following informalities:

Claim 4 recites "that it" on the second line. The use of these words in this claim is not clear. For the purposes of this Office action the examiner will interpret the claim in a manner that excludes the objected words. Appropriate correction is required to these and other similar words that may render a claims meaning unclear.

Information Disclosure Statement

Applicant's Information Disclosure Statement, filed on 6/17/2006, 4/25/2006 and 2/06/2006 has been received, and entered into the record.

However, It is impractical for the examiner to review the references thoroughly with the number of references cited in this case.

By signing the accompanying 1449 forms, the examiner is merely acknowledging the submission of the cited references and merely indicating that only a very cursory review has been made of the cited references.

MPEP § 2004.13 states:

It is desirable to avoid the submission of long lists of documents if it can be avoided. Eliminate clearly irrelevant and marginally pertinent cumulative information. If a long list is submitted, highlight those documents which have been specifically brought to applicant's attention and/or are known to be of most significance. See *Penn Yan Boats, Inc. v. Sea Lark Boats, Inc.*, 359 F. Supp. 948, 175 USPQ 260 (S.D. Fla. 1972), *aff'd*, 479 F.2d 1338, 178 USPQ 577 (5th Cir. 1973), *cert. denied*, 414 U.S. 874 (1974). But cf. *Molins PLC v. Textron Inc.*, 48 F.3d 1172, 33 USPQ2d 1823 (Fed. Cir. 1995).

Further, it should be noted that an applicant's duty of disclosure of material and information is not satisfied by presenting a patent examiner with "a mountain of largely irrelevant [material] from which he is presumed to have been able, with his experience and with adequate time, to have found the critical [material]. It ignores the real world conditions under which examiners work." *Rohm & Haas Co. v. Crystal Chemical co.*, 722 F.2d 1556, 1573 [220 USPQ 289] (Fed. Cir. 1983), *cert. Denied*, 469 U.S. 851 (1984). Patent applicant has a duty not just to disclose pertinent prior art references but to make a disclosure in such a way as not to "bury" it within other disclosures of less relevant prior art; see *Golden Valley Microwave Foods Inc. v. Weaver Popcorn Co. Inc.*, 24 USPQ2d 1801 (N.D. Ind. 1992); *Molins PLC v. Textron Inc.*, 26 USPQ2d 1889, at

1899 (D.Del 1992); Penn Yan Boats, Inc. v. Sea Lark Boats, Inc. et al., 175 USPQ 260, at 272 (S.D. Fl. 1972).

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1, 5, 8-11, 15, 18-21, 25, 29-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear if the words placed inside the parentheses are included or excluded as part of the claim language. In other words it is unclear what Applicants intended metes and bounds of the claims are.

Regarding claims 1, 5, 11, 15, 21, 25, the phrase "e.g." renders the claims indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

The claims listed above are by no means exhaustive applicant is required to make appropriate corrections to these and other claims that may have similar recitations.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

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Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. To be statutory, a claimed computer-related process must either: (A) result in a physical transformation outside the computer for which a practical application is either disclosed in the specification or would have been known to a skilled artisan, or (B) be limited to a practical application with useful, concrete and tangible result.

3. Claims 21-30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 21 – 30 are not limited to tangible embodiments. In view of Applicants' disclosure, specification page 112, paragraph 0372, the medium is not limited to tangible embodiments, instead being defined as including both tangible embodiments (e.g., [CD-ROM]) and intangible embodiments (e.g., [transmission medium]).

As such, the claim is not limited to statutory subject matter and is therefore non-statutory.

Claims 11-20 are not limited to tangible embodiments in view of Applicant's disclosure.

These claims appear to constitute solely software per se and/or appear to constitute solely an abstract idea without any practical application. These claims do not indicate use of hardware on which the software runs to perform the steps recited in the body of the claim. The program does not appear to have been stored in a tangible storage medium therefore it is program per se. Software or program can be stored on a medium and/or executed by a computer.

In other words the software must be stored in a tangible medium. As such, these claims are not limited to statutory subject matter and are therefore non-statutory.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-8, 11-18 and 21-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Patent No: US 6, 317, 754 to Peng (hereinafter Peng).

Claim 1.

Peng discloses:

A method for synchronizing a plurality of instances for a data platform, including without limitation a replica or a data source with or without an adapter, and said plurality of instances comprising a sync community, said method comprising [Synchronization, synchronization manager (adapter), objects (instances), Col 9 lines 25-30, 31-36, Figs 2-7]:

uniquely enumerating changes in sequence (e.g., increasing numbers) on an instance by instance basis (a change number) [update stamp, identifier, Col 3 lines 18-20, 43-45];

maintaining a vector for each instance, said vector comprising a most recent change number for said instance, as well as a most recent known change number for

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each other instances from among said plurality of instances that are known to said instance (each a known instance), wherein said vector (comprising change numbers for each known instance) inherently represents all changes that have been made to said instance [vector, update stamps, identifier, Col 3 lines 15-20, 43-45].

Claim 2.

Peng discloses the elements of claim 1 as above and furthermore it discloses wherein said change number comprises a unique identification number for said instance and a relative incremental count of changes made to said instance [update stamps (incremental count), identifier, Col 3 lines 15-20].

Claim 3.

Peng discloses the elements of claim 1 as above and furthermore it discloses wherein a first instance, to partially synchronize with a second instance, requests changes from said second instance by sending to said second instance its vector, and wherein said second instance, based on the vector it receives from said first instance, sends to said first instance only those changes that said first vector has not yet received [vector, differential synchronization (partially synchronize), objects (instance), Col 3 lines 26-35, Col 5 lines 48-61].

Claim 4.

Peng discloses the elements of claim 3 as above and furthermore it discloses wherein said second instance, based on the vector it receives from said first instance, further determines that said first instance has changes, said second instance, has not yet received, and sends its own vector to said first instance to request these changes, and wherein said first instance, based on the vector it receives from said second instance, sends to said second instance only those changes that said second vector has not yet received [sends vectors, receive vectors, Col 5 lines 40-59].

Claim 5.

Peng discloses the elements of claim 1 as above and furthermore it discloses wherein a first instance, when changing a first Item to e (via a Relationship) to a second Item that was not previously being synchronized (e.g., an out-of-scope Item), to send all change information pertaining to said second Item to a second instance when synchronizing with said second instance so that said second Item in said second instance is synchronized with said second Item in said first instance [Col 10 lines 21-29].

Claim 6.

Peng discloses the elements of claim 1 as above and furthermore it discloses when by default operation a parent Item is transmitted before a child Item to said parent Item, and wherein a plurality of changes are typically transmitted in sequential order of a plurality of change numbers corresponding to said changes during a synchronization,

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and wherein between synchronizations a child Item is changed and then a parent Item is changed in a first instance, any change units pertaining to said child Item are sent from said first instance to a second instance during a synchronization only after all change units pertaining to the parent Item are sent [synchronization, ordering, Col 6 lines 31-39].

Claim 7.

Peng discloses the elements of claim 1 as above and furthermore it discloses wherein, for an Item deleted by a first instance, a tombstone comprising the identification of the Item deleted is created, and said tombstone is sent as part of a synchronization to notify a second instance to identify the Item to be deleted in said second instance [delete, identifier, Col 13 lines 57-63].

Claim 8.

Peng discloses the elements of claim 7 as above and furthermore it discloses wherein, for a first instance having a parent Item and a first child Item to said parent Item, when said child Item is deleted and then said parent Item is deleted, said first instance sending only the change to said parent Item (that is, the tombstone for said parent Item) to a second instance during a synchronization where (a) the deletion of a parent Item automatically results in the deletion of all children Items for said parent or (b) the second instance, receiving the tombstone for the parent Item, proceeds to delete the parent Item and automatically deletes the child Item [delete, Col 6 lines 46-50, Col

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13 lines 57-63].

8. Subject matter of claims 11 – 18 and 21 – 28 are rejected in the analysis above in claims 1 – 8 and these claims are rejected on that basis.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 9-10, 19-20 and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peng in view of Pub No: 2004/0267834 A1 to Sasaki et al (hereinafter Sasaki).

Claim 9.

Peng discloses the elements of claim 1 as above but does not explicitly indicate the elements of claim 9, wherein a first Relationship and a second Relationship of a first instance swap names using a temporary name element such that, in order, (a) the name of the first Relationship is transferred to said temporary name element, (b) the name of the second Relationship is transferred to said first Relationship, and (c) said name stored in the temporary name element is copied to said second Relationship, and wherein said first instance synchronizes with a second instance and sends a duo of

change units representing, in order, (i) the new name for said first Relationship and (ii) the new name for said second Relationship, and wherein effecting the first of said duo of changes (a first change) results in an error in the second instance because a result of said first change is for the first Relationship and the second Relationship having the same name (an attempted change), a method by which said second instance proceed to copy said name of the first Relationship to a local temporary name element and [Synchronization, related object, Sasaki paragraph 0045, 0068, Fig 3A-6]:

if, during the synchronization, a subsequent change is received for copying the name of said second Relationship to said first relationship occurs, then performing said change as well as also copying said name in said local temporary name element to said first Relationship [copy, related object, synchronization, keys, replaced (change), Sasaki paragraph 0054, 0068, Fig 3A-6]; and

if, during the synchronization, a subsequent change is not received for copying the name of said second Relationship to said first relationship occurs, then raising a conflict regarding for the attempted change [copy, related object, synchronization, keys, Sasaki paragraph 0068, Fig 3A-6].

It would have been obvious to one of ordinary skill in the art of data processing to have combined the two references because the elements as disclosed by Sasaki would have enabled Peng to avoid conflicts with the storage of processing capacities of the mobile device, such as, using excessive amount of memory to store related objects which adversely impacts the performance of the mobile device [Sasaki paragraph 0005].

Furthermore Sasaki disclosure would serve to enable Peng download all objects even though the data objects related to a particular data object may not be already present in the device [Sasaki paragraph 0005].

Claim 10.

Peng discloses the elements of claim 1 as above and furthermore it discloses wherein, for synchronization between a first instance on a storage platform that allows a dangling relative reference and a second instance on a storage platform that does not allow a dangling relative reference that include at least one change to a relative reference and at least one other change (in that order), sending said change to said relative references after said one other changes [key deleted or ignored (dangling relative reference), copy, related object, synchronization, keys, Sasaki paragraph 0068, Fig 3A-6].

11. Subject matter of claims 9 – 20 and 19 – 30 are rejected in the analysis above in claims 9 – 10 and these claims are rejected on that basis.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emeka Ebirim whose telephone number is 571-272-3994. The examiner can normally be reached on 8:30pm - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam, can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Emeka Ebirim
Examiner
Art Unit 2166

May 22, 2006


KHANH B. PHAM
PRIMARY EXAMINER